Title (en)

LOW TEMPERATURE BONDING OF REFRACTORY AGGREGATES AND REFRACTORY PRODUCTS OF IMPROVED COLD STRENGTH

Publication

EP 0135773 B1 19890301 (EN)

Application

EP 84109694 A 19840814

Priority

US 52434283 A 19830818

Abstract (en)

[origin: US4473654A] Satisfactory bonding of refractory aggregate is obtained by providing the aggregate with at least 5.0% by weight of free CaO of minus 200 mesh (Tyler Standard Sieve) particle size, adding a small amount of a lithium compound to the aggregate and heating to a temperature of about 450 DEG C. The modulus of rupture at room temperature of a brick made from dead burnt dolomite aggregate containing a fine fraction providing the finely divided CaO and the lithium compound additive and fired to 450 DEG C. is well above 400 psi and may be substantially equivalent to that of a brick made of the same aggregate without the lithium compound additive and fired to 1200 DEG C. The invention comprises the method of increasing the low temperature bonding strength of refractory aggregates, the unfired mixtures of the refractory aggregate containing the requisite CaO and the lithium compound with or without temporary liquid or solid binding agents, and the fired products made therefrom.

IPC 1-7

C04B 35/02; C04B 35/06; C04B 35/66

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DOCDB simple family (publication)

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